one of the all the year round bathers, at first in the Serpentine, Hyde Park, and afterwards in the Thames at Kew, and twice finished in the first six in the long distance swimming championship in the Thames, for which he received medals.

[Much of the foregoing information was kindly supplied by

Mr. H. C. Fulton.]

B. B. W.

DR. HENRY WOODWARD, F.R.S., ETC.¹ 1832-1921.

Read by the President, 11th November, 1921.

SINCE this Society last met it has sustained the grievous loss of one of its most prominent Members, Dr. Henry Woodward, who was amongst the most active of its founders, its first President, and the first nominated of the three Honorary Members elected at the

beginning of the present year.

Dr. Woodward's great achievements in the palæontological world are so well known and have been so well set forth elsewhere with full biographical details, that only a brief allusion to the more important is here necessary. He was born at Norwich 24th November, 1832, and was the fifth son of Samuel Woodward, the celebrated Norfolk geologist and antiquarian. Leaving school in 1846, he went to reside with his brother, Dr. S. P. Woodward, the far-famed malacologist, who was then a Professor at the Royal Agricultural College, Cirencester, and it was there, whilst attending the lectures and making field excursions, that young Henry developed his love of natural history. When his brother was appointed in 1849 to the British Museum, Henry came with him to town, but after an interval of temporary employments of a scientific nature, went to Norwich and spent the years between 1851 and 1858 in the East of England Bank there. In the latter year he obtained a junior post in the Geological Department of the British Museum under the Keepership of Mr. G. R. Waterhouse. Successive promotions followed till, on the death of his brother in 1865, he succeeded as First Class Assistant, and on Mr. Waterhouse's retirement in 1880 became Keeper of the Department.

On him devolved the task of organizing and superintending the removal of the geological collections to the then new Natural History Museum at South Kensington, and their display in their new quarters. His arrangement persists to this day, and with the excellent guide books he wrote, or superintended, is a standing testimony to the able way in which the work was carried out. So highly were his services appreciated that, with Treasury sanction, he was retained in his post for four years beyond the normal limit, and was then employed on work in his old department for yet another four

¹ A portrait of Dr. Woodward was published as frontispiece to these *Proceedings*, Vol. VI.

years, finally quitting the scene of his labours in 1904, thereby

terminating forty-six years of continuous service.

A Fellow of many of the principal Societies, besides the Royal Society to which he was elected in 1873, and Member of many other scientific bodies at home and abroad, he both served on their governing bodies and in turn as President of many of them besides our own, whilst in 1878 the University of St. Andrews conferred upon him the honorary degree of LL.D. Albeit, however, that these and other honours came to him, he will probably be yet best remembered for his long connection with the "Geological Magazine", which he founded in 1864 and edited from then to almost the close of his life.

To the "Geological Magazine" and many other scientific serials he contributed largely, some 350 papers, mostly on the fossil Crustacea, coming from his pen, besides a few distinct works, to say nothing of his official publications. We, however, are primarily concerned with those bearing on our particular subject: these are

as follows :--

1872.

1864. With R. MacAndrew "Species of Mollusca obtained in Corunna Bay, in May, 1863". Ann. & Mag. Nat. Hist., ser. III, vol. xiv, p. 232. 1866. ("On the form, growth, and construction of Shells." (Edited from

the manuscript of S. P. Woodward.) Intellectual Observer, 1867. x, p. 241; xi, p. 18.
"Economic uses of Shells, and their Inhabitants." Id., xi, p. 161.

1867.

"On Actinoceras baccatum, a new species of Orthoceratite from the Woolhope Limestone." Geol. Mag., 1868, p. 132. 1868.

"The Pearly Nautilus, Cuttle-fish, and their allies." [Embodying 1869. notes by S. P. Woodward.] Student & Intellectual Observer, iv, pp. 1 & 241.

1870. "Distribution of the Cephalopoda in Silurian countries; being a review of M. Barrande's work." Geol. Mag., 1870, p. 486.

"On the structure of the Shell of the Pearly Nautilus." 1871. Assoc., 1870 (1871), p. 128. 1871.

"The Tertiary Shells of the Amazons Valley." Ann. & Mag. Nat.

Hist., ser. IV, vol. vii, pp. 59 & 101. 1872. "On a new species of Rostellaria from the Gray Chalk, Folkestone." Geol. Mag., 1872, p. 97.
"On the structure of Camerated Shells." Popular Science Review,

xi, p. 113. "Notes on a collection of Fossil Shells, etc., from Sumatra." Geol. 1879. Mag., 1879, pp. 385, 441, 492 & 535. Article "Mollusca" in Cassell's Natural History, v, p. 154.

1881.

"On a new genus of Fossil 'Calamary' [Dorateuthis syriaca, n. gen. & 1883. sp.] from the Cretaceous formation of Sahel Alma, near Beirût, Lebanon, Syria." Geol. Mag., 1883, p. 1.

"On some Palæozoic Phyllopod-shields [some of which were probably 1885.

Aptychi of Goniatites]," etc. Geol. Mag., 1885, p. 345.
"On a new species of Helminthochiton [H. Grayiæ] from the Upper Bala (Silurian) of Girvan, Avrshire." Id., p. 352.
"On Recent and Fossil Pleurotomariæ." Id., p. 443.
[On a specimen of Pinnotheres [sic] in a Pearl in Meleagrina.] Proc. 1885.

1885.

1885. Zool. Soc., 1885, p. 176.

"An address delivered at the Anniversary Meeting of the Malacological 1894. Society . . . 1894." Proc. Malac. Soc., i, p. 178.

1896. "On a Fossil Octopus (Calais Newboldi, J. de C. Sby. MS.) from the Cretaceous of the Lebanon." Quart. Journ. Geol. Soc., lii, p. 229. [Name changed to Palæoctopus Newboldi, Geol. Mag., 1896, p. 567.]

1901. "Note on the discovery of a very fine example of Pleurotoma prisca,
Solander, sp. (1766), at Barton, Hants." Geol. Mag., 1901, p. 409.
1910. "On some supposed Pholas-borings from the shores of Birket el Qurûn,

1910. "On some supposed Pholas-borings from the shores of Birket el Qurûn, the ancient Lake Moeris, of the Fayûm, Egypt." Geol. Mag., 1910, p. 398. [They were decided to be the casts of Plant remains.]

1910. "A fragment of a Fossil [a water-worn fragment of the chambered portion of a Radiolite] in a Chalk Flint Pebble from the Sherring-

ham Beach, Norfolk." Geol. Mag., 1910, p. 483.

1918. "Notes on some Fossil Arthropods from the Carboniferous rocks of Cape Breton, Nova Scotia." Geol. Mag., 1918, p. 462. [Gives on p. 465 the figure of Anthracomya arenacea, Dawson, found in association with the above.]

It is easy thus to limn in outline Dr. Woodward's history and works, but a more difficult task to pay just tribute to his many endearing qualities. His geniality and bonhomie were familiar to all who were privileged to know him, but he had more enduring characteristics. In this connection we may be allowed to quote the words which Professor Bonney addressed to him on the "Coming of

Age" of the "Geological Magazine" in December, 1885:-

"It is possible for an editor to nip early aspirations in the bud and to petrify the neophyte in science by a cold breath of disapproval or sarcasm. All, however, who, like myself, have made in the pages of the 'Geological Magazine' their first venture in scientific authorship, will be ready to testify to the kind welcome and friendly encouragement which we received from you. Many, I feel sure, have thus been animated to further efforts; so that you may with just pride assert that under your auspices the 'Geological Magazine' has enlisted many recruits for the great army of scientific workers. Yet more, not only in its pages, but also at your place in the British Museum, you have been ever ready to help the student, and to place at his disposal, with unvarying kindness and courtesy, the full stores of your ripe knowledge."

Many, moreover, had practical experience of his generosity when

need arose.

Although the long seclusion of his later days, when he was no longer able to attend our meetings, has somewhat softened the blow, his passing will be greatly felt by us all, especially those of the older generation, albeit we shall ever treasure his memory as a precious possession.

B. B. W.

Dr. Walter George Ridewood, F.L.S., etc. 1867-1921.

Dr. W. G. Ridewood, one of our Life Members, joined this Society in 1900 and served on the Council in 1903-05 and 1909-11, besides being one of its Vice-Presidents in 1905-08.